Service Coordination Board (SCB) Meeting Summary

Date: 15 October 2014

Members in attendance:

| | Member | In |
|-----------------|------------------|------------|
| | | Attendance |
| AES | John Maclean | ٧ |
| | Geoff Pile | ٧ |
| ASD | Ju Wang | |
| | Ali Nassiri | ٧ |
| XSD | Mark Beno | ٧ |
| | Chris Jacobsen | |
| | Jonathan Lang | V |
| Upgrade Project | Tom Fornek | |
| | Mohan Ramanathan | ٧ |

Also in attendance: Steve Davey, Chuck Prokuski, George Srajer, and Rose Torres

This report can be accessed through the following link: APS 1663355

Agenda:

- I) Review of Meeting Minutes
- II) Review of Open Action Items
- III) Status of Projects
- IV) Other Business
- V) New Business
 - P-1773 Sector 31 Horizontal Stripline

Next Meeting

15 October 2014

New Action Items

1) Action item: clarify with DD ASD plans/priorities (Nassiri and Maclean)

Review of Open Action Items

Items from September meeting:

 Review/update the scope of the Linac Accelerating Structures – Phase I project (P-2233, <u>APS 1445304</u>) and email update to SCB before the next meeting (update of action item 1 from the Items from August SCB meeting) (Nassiri)

Done

- Review the Installation plan of SCU-1 into Sector 1 project (P-2253, <u>APS_1445357</u>) and the questions regarding the site prep work and associated costs (Pile)
 Done
- 3) Talk to Srajer and request ASD to submit a proposal for the work for the sector 30 vacuum chamber with Sajaev completing the project proposal. (Pile and Maclean)

 Done Per Ramanathan: a project proposal will not be required for 30.
- Review SCB estimate/reported time data (Davey)
 Done

Ongoing Action Items:

- Nassiri to talk with Zholents and Borland to clarify the scope of the Linac Accelerating Structures Phase I (Straightening the Linac) project (P-2233, <u>APS 1445304</u>) (Nassiri)
 Done
- 2) Lang to request Tischler complete a close-out form for the Mirror Support Stages and Wire Support project (P-1094, <u>APS_1433103</u>) Open – Lang sent e-mail & will follow-up
- 3) Work with Michael Fisher regarding opening a new proposal submitting a new proposal for a new stand ~160 Hours and provisional approval sought. (Beno)
 Open
- 4) Close SCU 1-m Long Magnet Design and Fabrication project (P-1153, <u>APS 1433098</u>) (Davey) Open Closed but time still being booked against it Nassiri to clarify status.
- 5) Status delays for GISAXS Sample Changer (P-1753, APS 1440655) (Pile) Closed material deliveries had delayed progress, materials now received
- Group leader review of revised Sector 35/Sector 31 Straight Section Exchange project (P-1833, <u>APS 1442033</u>) (Torres)
 Open – (See Status of Projects section)

Meeting Summary

Torres distributed:

- 1) Meeting Agenda
- 2) Draft minutes form the 17 September meeting (APS 1661544)
- 3) APS Project Report Summary August 2014 (APS 1442081, rev. 13)
- 4) APS Project Resource Summary- September 2014 (APS 1432632, rev.43)

5) APS Project Report Summary Comment - September 2014(APS 1440691, rev 16)

Review of Meeting Minutes –17 Sept 2014 meeting summary accepted

Status of Projects

- Sector 35/Sector 31 Straight Section Exchange project (P-1833, APS 1442033)
 - Per Bill Berg the project will follow the stripline project and therefore needs to be scheduled after the stripline. Has ASD committed to funding the stripline?
 - With Leonard Morrison's move from MED to MOM, Franck Westferro expected to be assigned as the lead engineer for the project. Morrison will guide the new engineer to help them up the learning curve/transfer of knowledge.
 - Action item: clarify with ASD DD the plans/priorities (Nassiri and Maclean)

Other Business

- Pile: There some confusion among some stakeholders about project/SCB roles and responsibilities - responsibilities need to be clarified
 - While the SCB has defined processes there are many misconceptions about roles/responsibilities (e.g., who is responsible for a project - requestor, project engineer?).
 - Even though the APS organizations set priorities and commit non-effort resources, the SCB is perceived to be responsible for project support (not just the commitments to effort) and reporting to the ALD. Project managers and requestors each have project management responsibilities.
 - Srajer: CAMs will be responsible for overseeing projects.
 - o Ramanathan: CY should be responsible for the stripline project
 - Maclean: Organizations need to set priorities
 - Pile: Design reviews, QA, safety etc. all need to be addressed as part of the full scope of a project
 - Pile has drafted a list of roles versus responsibilities that can be discussed (see Attachment A)
- Davey presented information on experiences with effort estimates and capturing effort (see Attachment B).

Next Meeting: 19 November 2014, 401/B4100, 11:15

Attachment A – Large Project Roles & Responsibilities (Pile)

ALD: periodically review the proposed projects list and approves the allocation of funds and resources to (usually a subset of) those proposed projects

Service Coordination Board (SCB): The SCB exists to ensure that APS resources are assigned to the highest priority projects. It has members from each ASP division and from the APS Upgrade. Projects are only given final approval to proceed if sufficient resources are available. The SCB monitors on-going projects and tracks progress.

Project Sponsor: Initiates, authorizes the use of divisional funds and owns the project, is accountable to the ALD for its success and is the key decision maker. This could be a Deputy ALD, Divisional Director or his/her Associate Division Director. Responsible for reviewing that plans have appropriate level of detail – i.e. milestones for safety, design and installation readiness reviews.

Project Manager: accountable to the Project Sponsor, and is responsible for planning, execution and closure of the project.

Team Manager(s): reports and takes direction from the Project Manager and is responsible for planning and delivery of all or a subset of the project's products.

Project Support: reports and takes direction from team manager and higher level management.

Team: Executes project, takes direction for team manager and higher level management.

User: responsible for the specifying the needs of the users of the project's products and monitoring their quality, functionality and ease of use.

Supplier: represents the interests of those developing, procuring and implementing the project's products.

Attachment B - Effort Reporting and Effort Estimates (Davey)

Level of effort as reported through "green sheets" (what's being captured)

Level of effort booked against projects for the 1st half of FY14.

- Number of "active" projects booking hours: 24
- Total effort booked for 6 months: 10,389 hours
- Average total effort booked per month: 1732 hour => ~12 FTEs
 - Design Drafting: 5.4 FTEs
 - o MED: 5.2 FTEs
 - o IS: 0.5 FTEs
 - o MOM: 0.2 FTEs
 - o BCDA, Controls, Survey and Alignment, and Safety interlocks each < 0.2 FTEs
- Average effort booked per project per month: 72 hours => ~0.5 FTEs

Level of effort increase or decrease during a shutdown?

 Monthly average over the Dec/Jan shutdown: 9.9 FTEs (versus 12 FTEs averaged over six months)

Update: Level of effort booked against projects August 2014.

- Number of projects booking hours: 7
- Total effort booked: 826 hour =>~5.8 FTEs
 - Design Drafting: 3.3 FTEs
 - o MED: 2.3 FTEs
 - o Controls: 0.1 FTEs
- Average effort booked per project: 118 hours =>~ 0.8 FTEs

Conclusions

- Most Groups were not booking significant time against projects.
- Trending: effort booked in August at ~ ½ the level for the first six months of FY14 (Less effort for projects and/or less effort captured in "green sheets"?)
- Shutdown v. operations: Dec. 13/Jan 14 shutdown level of effort (~10 FTEs) v. average (~12 FTEs)

Estimates v. booked/reported "actuals" for completed projects

Completed projects (based on Torres report APS_1443620)

| | Data Source | Effort | | | |
|---|---|--------------------------------|--------------------------------------|-----------------------------|-----------------------------------|
| | | Total for all projects (hours) | Total for all projects (FTE-Years) 1 | Average per project (hours) | Average per project (FTE-Years) 1 |
| All projects | planned effort (i.e., approved estimates) | 31,264 | 18 | 1,820 | 1.1 |
| Projects with "green sheet" data | planned v. "green sheet" booked hours | | | | |
| | planned | 21,612 | 12.8 | 1,271 | 0.75 |
| | booked | 14,679 | 8.6 | 863 | 0.51 |
| | planned-booked | 6933 | 4.2 | 408 | 0.24 |
| | booked/planned | 68% | | | |
| | | | | | |
| Projects with "reported" effort ² | planned v. hours reported | | | | |
| | planned | 23,408 | 13.8 | 1,115 | 0.66 |
| | reported | 20,188 | 11.9 | 961 | 0.57 |
| | planned-reported | 3220 | 1.9 | 154 | 0.09 |
| | reported/planned | 86% | | | |
| Projects with both "green sheet" data | planned effort v. | | | | |
| and "reported" effort | reported and booked | | | | |
| | planned | 21,452 | 12.6 | 1,341 | 0.79 |
| | reported | 19,304 | 11.4 | 1269 | 0.77 |
| | booked | 14,676 | 8.6 | 917 | 0.54 |
| | reported-booked | 4,628 | 2.8 | 352 | 0.23 |
| | booked/reported | 76% | | | |

¹used 1700 hour = FTE-year

 $^{^{\}rm 2}$ "reported" data includes various sources including green sheets and reports to Torres

Conclusions

- "Green sheet" data appears incomplete "reported" effort, including various sources (green sheets, project managers, service-providing group leaders input), captures about 30% more effort than "green sheets" alone.
- WBS-based Dayforce data should be more complete once implemented.
- Average total project effort (~1,000 to 2,000 FTE-hours) significantly exceeded the
 project-defining threshold of 100 FTE-hours (it appears that 100 to 1,000 hour projects
 not going through the project proposal system/SCB).

Effort exceeding estimates in on-going projects

Sample of current active projects with hours already completed > original approved planned hours (September '14 resource summary)

- DD
- P-1153, SCU1
 original approved planned hours: 608
 hours completed: 4,981 (819% of planned)
- P-1373, transverse deflecting cavity original approved planned hours: 610 hours completed 1618 (265% of planned)
- P-1374, new electron gun original approved planned hours: 240 hours completed: 2241 (934% of planned)
- P-1833, Sector 35 to 31 move original approved planned hours: 160 hours completed: 491 (307% of planned)
- P-482, 1-ID-E instrumentation
 original approved planned hours: 320
 hours completed: 1160 (363% of planned)
- MED, engineers
 - P-1154, BPM enhancement original approved planned hours: 480 hours completed 829 (173% of planned)
 - P-1374, new electron gun original approved planned hours: 152 hours completed: 1163 (765% of planned)
 - P-1713, Sector 37 scrapper original approved planned hours: 160 hours completed: 586 (366% of planned)

 P-1833, Sector 35 to 31 move original approved planned hours: 244 hours completed: 916 (375% of planned)

Conclusions

- Active projects already significantly overrunning original estimates
 - o DD hours requested: 8,107
 - o DD hours completed: 12,674 (156% of requested)
 - these overruns \sim 9.8 months of all DD booked effort at Aug '14 levels
 - o MED-engineer hours requested:6,743
 - o MED-engineer hours completed: 8,200 (121% of requested)
 - these overruns ~4.5 months of all MED booked effort at Aug '14 levels
- Trending could look to see if estimates are improving (though above examples may indicate the contrary)

Projects in the WBS

| Div/ Project number | Project Title | WBS | WBS Title | note |
|---------------------------|--|-----------------|--|-----------------|
| AES | | | | |
| 408 | SR Vacuum Chamber Cooling Skid Exchanger Replacement | APS.02.02.03.05 | SR Vacuum Chamber Cooling Skid | |
| 426 | Process Cooling Water Flowmeter Upgrade | APS.02.02.03.06 | Process Cooling Water Flowmeter Upgrade | |
| 456 | Insertion Device Control Upgrade | APS.02.02.02.06 | Insertion Device Control Upgrade | |
| 1174 | XRAY Network and server upgrades | APS.03.02.02.02 | X-ray Network and Server Upgrades | |
| 1213 | SR Bunch Current monitor servers | | | unfunded? |
| 1813 | Move Business Application from Solaris to Linux | APS.01.01.01.01 | Move Business Applications from Solaris to Linux | |
| | | | | |
| ASD | | | | |
| 627 | | APS.02.02.03.01 | Spare Booster Tuner Fabrication | |
| 1153 | 1m long SCU Prototype Magnet and SCU Cryostat | | | complete? |
| 1154 | | APS.02.02.02 | X-ray BPM Enhancement | |
| 1334 | S-band Klystron | | | 99% complete |
| 1373 | Linac Tranverse Deflecting Cavity | APS.02.02.01.03 | Linac Transverse Deflecting Cavity | |
| 1374 | APS New Electron Gun | APS.02.02.02.01 | PC Gun Commissioning | |
| 1713 | Sector 37 Scraper Upgrade | | | on hold |
| 1833 | S35/S31 Straight Section Exchange | APS.02.02.02.03 | S/35/S31 Straight Section Exchange | |

| Div/ Project | Project Title | WBS | WBS Title | note |
|-----------------|--|-----------------|---|---------|
| number | | | | |
| 2233 | Linac Structures - Phase | APS.02.02.02.03 | Linac Structures - Phase | |
| 2253 | Installation of SCU-1 into Sector 1 | APS.02.02.01.01 | Long SCU Installation/ Commissioning | |
| | | APS.02.02.01.02 | VPU Device | |
| | | APS.02.02.02.05 | AIP 1205 - RF BPM Upgrade | |
| | | APS.02.02.02.04 | AIP 1250 - Booster Kicker Upgrade | |
| | | | | |
| XSD | | | | |
| 482 | Instrumentation of 1- ID-E hutch for high energy diffraction | | | No WBS? |
| 1097 | | APS.03.02.02.03 | High-throughput Development for 11-ID-B | |
| 1098 | | APS.03.02.01.05 | Engineering of modular Kirkpatrick- Baez mirror systems | |
| 1454 | DOE Early Career Award Vacuum System with Motion Control | | | No WBS? |
| 1673 | | APS.03.03.04 | Installation, test, & commissioning of a 400kJ Capacitor Bank on 6-ID-B | |
| 1753 | | APS.03.02.01.04 | GISAXS Sample Changer | |
| | | APS.03.02.01.01 | Superconducting Energy-Dispersive Detectors | |
| | | APS.03.02.01.02 | VIPIC Ultra-fast XPCS Detector | |
| | | APS.03.02.01.03 | Germanium Strip Detector | |
| | | APS.03.02.02.01 | Xpress Detectors | |

| Div/ Project number | Project Title | WBS | WBS Title | note |
|---------------------------|---------------|-----------------|------------------------------|------|
| | | APS.03.02.03.01 | Quick XARS Mono for 9- BM | |
| | | | | |

live in DayForce expected 15 October funded w/o project effort

Conclusions

- On 15 October most SCB approved project were added to Day Force (project effort data not collected for the 1st two weeks of October).
- If a project was not progressing, no WBS numbers were assigned recommend if a project is approved, it can be booking time at any time and should therefore be in the WBS.
- Effort should be tracked by project numbers / WBS numbers (which are unambiguous), titles are flexible and can be ambiguous.

